INDEX

ABSORPTION, fat influence of certain hydrotropic and other substances upon 365
Absorption, fat, in the rat, influence of vitamins A, B or D, anemia or fasting upon the rate of 357
Absorption of different fats, comparative rate of 103
Absorption of fats, technic for determining 85
Alfalfa leaf meal, effect of, on hatchability of hens' eggs 300
ALMQUIST, H. J. AND E. L. R. STOKSTAD. Factors influencing the incidence of dietary hemorrhagic disease in chicks 329
ALMQUIST, H. J. See Asmundson, V. S. 1
Ammonium chloride, and sodium bicarbonate, effect of administration of, on the amount of ascorbic acid found in the urine 215
Amylase, malt, effectiveness of, on the gastric digestion of starches 59
Anti-gizzard-erosion factor required by chicks, distribution and properties of 571
Ascorbic acid, effect of administration of orange juice, crystalline ascorbic acid, sodium bicarbonate and ammonium chloride on amount of, in urine and on the hydrogen ion concentration of urine 218
Ascorbic acid found in the urine, effect of administration of sodium bicarbonate and of ammonium chloride on amount of 215
Ascorbic acid, relation of ingestion of, to retention 20
ASMUNDSON, V. S., H. J. ALMQUIST AND A. A. KLOSE. Effect of different forms of iodine on laying hens 1

BARROWS, W. M., JR. See Murlin, John R. 613
Basal metabolism of the albino rat, the relation of season, sex and weight to 223
BEAZELL, JAMES M. See Ivy, A. C. 59
BERG, CLARENCE P. The availability of *d*(—)-lysine for growth 671
BETHKE, R. M., P. R. RECORD AND D. C. KENNARD. The relation of vitamin G to the hatchability of hens' eggs 297
BETHKE, R. M., P. R. RECORD AND F. W. WILDER. The effect of the ration of the hen on the vitamin G content of eggs with observations on the distribution of vitamin B and G in normal eggs 309
BILLS, CHARLES E. See Massengale, O. N. 429
BIRD, H. R., O. L. KLINE, C. A. ELVEHJEM, E. B. HART AND J. G. HALPIN. The distribution and properties of the anti-gizzard-erosion factor required by chicks 571
BIRD, H. R. See Kline, O. L. 455
Blood chemistry of Eskimos 339
Blood fat determination, chylomicron method 95
Blood response to calcium and iron .. 373
Blood sugar in rats rendered cataractous by dietary procedures .. 395
BOHSTEDT, G. See Hayward, J. W. 275
BROWN, ALAN. See Drake, T. G. H. 527
BURTON, ALAN C. See Murlin, John R 613
Butter fat, specific dynamic action of 613
BUTTON, LUCIUS L. See Hawley, Estelle E. 215

CALCIUM, relation of, and of iron to the erythrocyte and hemoglobin content of the blood of rats consuming a mineral deficient ration 373
Capillary resistance, relation to vitamin C intake and excretion 425
Carbohydrates and fats of the green leaf, availability of, together with observations on crude fiber 255
Carotene, effect of the (vitamin A) intake on the vitamin D requirement of rats in the production and cure of rickets 39
Casein and cystine supplements, effect of, upon the nutritive value of the protein of raw and heated soy beans 275
Cataract, dietary, blood sugar in 395
Chicks, dietary hemorrhagic disease in, factors influencing the incidence of 329
Cataract in rats given graded amounts of vitamin G-containing foods, inverse relation between growth and 387
Cataract nutritional, susceptibility of different strains of rats to 447
Chicks, distribution and properties of the anti-gizzard-erosion factor required by 571
Chickens, quantitative method for the assay of vitamin D with 429
Children of preschool age, vitamin C studies with 15
Children, young, utilization and retention of vitamin B by 597
Cholesterol, blood, and lipid-P in dystrophic rabbits 178
Cholesterol, tissue, summary of studies 187
CLARK, DWIGHT E. AND JOHN R. MURLIN. The effects of glucose, fructose and galactose on ketosis, produced by anterior pituitary extract and by pancreatectomy 469
CORDILL, SHIRLEY C. See Eaton, A. G. 113
COULSON, E. J. See Remington, Roe E. 27
COWGILL, G. R. See Horwitt, M. K. 237, 255

COX, WARREN M., JR. AND MIRIAM IMBODEN. The effect of mono-, di- and tricalcium phosphates on reproductive success in rats 509
Cystine and casein supplements, effect of, upon the nutritive value of the protein of raw and heated soy beans 275

DANIELS, AMY L. See Everson, Gladys J. 15
DANN, FLEMINTINE PEIRCE. Vitamin B assay using rat curative method with modified diets and oral administration of addenda 461
DARBY, WILLIAM J. See Day, Paul L. 387
DAY, PAUL L. AND WILLIAM J. DARBY. The inverse relation between growth and incidence of cataract in rats given graded amounts of vitamin G-containing foods 387
DAY, PAUL L. Blood sugar in rats rendered cataractous by dietary procedures 395
Dietary hemorrhagic disease in chicks factors influencing the incidence of 329
Diet, studies on the relation of, to goiter 27
Diets, high protein, activity of yeast extracts in the prevention of renal hypertrophy caused by 155
DRAKE, T. G. H., F. F. TISDALL AND ALAN BROWN. The antirachitic value of irradiated yeast in infants 527
Dystrophy, nutritional muscular metabolism studies in 191
Dystrophy, nutritional, muscular, studies of the blood and tissues in 173
DUTCHER, R. ADAMS. See Tabor, Florence S. 39

EATON, A. G., SHIRLEY C. CORDILL AND J. L. GOUAUX. The specific dynamic action of glycine intravenously administered to nephrectomized dogs 113
Egg, iodine in yolk and albumen of 3
Egg production of birds given iodine 5
Eggs, hens' relation of vitamin G to the hatchability of 297
Eggs, normal, vitamin G content of, and distribution of vitamin B and G in 309
ELVEHJEM, C. A. See Bird, H. R. 571
ELVEHJEM, C. A. See Kline, O. L. ... 455
ELVEHJEM, C. A. See Sherman, W. C. 321
Erythrocyte and hemoglobin content of the blood of rats consuming a mineral deficient ration, relation of calcium and of iron to 373
Eskimos, blood chemistry of 339
Eskimos, Canadian Eastern Arctic, metabolic studies of 337
Eskimos, respiratory quotients of 349
Eskimos, sodium chloride and nitrogen concentrations of urines of 341
EVERSON, GLADYS J. AND AMY L. DANIELS. Vitamin C studies with children of preschool age 15

FAT absorption, direct method of determining 86
Fat absorption, influence of certain hydrotropic and other substances upon 365
Fat, butter, specific dynamic action of 613
Fat diets, high, rate of ketogenesis in human subjects on, as influenced by different sugars 645
Fats, absorption of, technic for determining the rate of 85
Fats, comparative rate of absorption of different 103
Fecal flora, study of, and the line test of normal rats, rachitic rats and healing rachitic rats 165
FENTON, FAITH, DONALD K. TRESSLER AND CHARLES G. KING. Losses of vitamin C during the cooking of peas 285
Foods, antigoitrogenic value of some 27
Food utilization in beef heifers, phosphorus deficiency metabolism and 121
FRANKE, KURT W. AND VAN R. POTTER. The effect of selenium containing foodstuffs on growth and reproduction of rats at various ages 205
FRIEDMAN, HELEN. A study of the fecal flora and the line test of normal rats, rachitic rats and healing rachitic rats 165
FRAZER, JOHN P. See Hawley, Estelle E. 215

GIZZARD factor 571
Glucose, fructose and galactose, effects of, on ketosis produced by anterior pituitary extract and by pancreatectomy 469
Glucose, sucrose and fructose, effects of, on ketone substance production in phlorhizinized dogs 491
Glycine, specific dynamic action of, intravenously administered to nephrectomized dogs 113
Glycogen, muscle, in normal and dystrophic rabbits 183
Goiter, studies on the relation of diet to 27
GOSS, HAROLD. See Kleiber, Max ... 121
GOUAUX, J. L. See Eaton, A. G. 113
Growth and incidence of cataract, inverse relation between, in rats given graded amounts of vitamin G-containing foods 387
Growth and reproduction of rats, effect of selenium containing foodstuffs on 205
Growth response in chicks, difference between those fed egg white diet and those fed purified casein diet 535
Growth, the availability of *d*(—)-lysine for 671
GUERRANT, N. B. See Tabor, Florence S. 39
GUILBERT, HAROLD R. See Kleiber, Max 121

HALPIN, J. G. See Bird, H. R. .. 571
HANNING, FLORA. Comparison of the biological and chemical methods for the determination of vitamin C in canned strained vegetables and a study of its variation from year to year 405
HART, E. B. See Bird, H. R. 571
HART, E. B. See Kline, O. L. 455
HAWLEY, ESTELLE E., JOHN P. FRAZER, LUCIUS L. BUTTON AND D. J. STEPHENS. The effect of the administration of sodium bicarbonate and of ammonium chloride on the amount of ascorbic acid found in the urine 215
HAYWARD, J. W., H. STEENBOCK AND G. BOHSTEDT. The effect of cystine and casein supplements upon the nutritive value of the protein of raw and heated soy beans ... 275

Heat, indirect, calculation of, for R.Q.'s below 0.707 613
Heifers, beef, phosphorus deficiency metabolism and food utilization in 121
Hen effect of ration of, on the vitamin G content of eggs with observations on the distribution of vitamin B and G in normal eggs 309
Hens, laying, effect of different forms of iodine on 1
HILL, ROBERT M. See Longwell, Bernard B. 155
HORWITT, M. K., G. R. COWGILL AND L. B. MENDEL. The availability of the carbohydrates and fats of the green leaf together with some observations on crude fiber 255
HORWITT, M. K., G. R. COWGILL AND L. B. MENDEL. The availability of the proteins and inorganic salts of the green leaf 237

IMBODEN, MIRIAM. See COX, Warren M. Jr. 509
Infants, the antirachitic value of irradiated yeast in 527
Iodine bearing foods, correlations between thyroid size and iodine content and thyroid size and dry matter content in rats fed 32
Iodine containing-foods, the goiter preventing value of 30
Iodine, effect of different forms on laying hens 1
Iodine, in form of milk and oysters, effect of equivalent dosages of ... 34
Iodine in yolk and albumen of egg 3
Iron, relation of, and of calcium, to the erythrocyte and hemoglobin content of the blood of rats consuming a mineral deficient ration 373
IRWIN, MARGARET HOUSE, H. STEENBOCK AND A. R. KEMMERER. The influence of vitamins A, B or D, anemia or fasting upon the rate of fat absorption in the rat 357
IRWIN, MARGARET HOUSE, H. STEENBOCK AND VERA MAY TEMPLIN. A technic for determining the rate of absorption of fats 85
IRWIN, MARGARET HOUSE, JANET WEBER AND H. STEENBOCK. The influence and certain hydrotropic and other substances upon fat absorption 365
IRWIN, MARGARET HOUSE. See Steenbock, H. 103
IVY, A. C., C. R. SCHMIDT AND JAMES M. BEAZELL. On the effectiveness of malt amylase on the gastric digestion of starches 59

JOHNSTON, ROBERT P. See Longwell, Bernard B. 155
JUKES, THOMAS H. See Lepkovsky, Samuel 515

KEMMERER, A. R. See Irwin, Margaret House 357
KENNARD, D. C. See Bethke, R. M. 297
Ketogenesis, rate of, in human subjects on high fat diets, as influenced by different sugars 645
Ketosis, effects of glucose, fructose and galactose on, produced by anterior pituitary extract and by pancreatectomy 469
KING, CHARLES G. See Fenton, Faith 285
KLEIBER, MAX, HAROLD GOSS AND HAROLD R. GUILBERT. Phosphorus deficiency metabolism and food utilization in beef heifers ... 121
KLINE, O. L., H. R. BIRD, C. A. ELVEHJEM AND E. B. HART. The distribution of vitamin B_4 in some plant and animal products 455
KLINE, O. L. See Bird, H. R. 571
KLOSE, A. A. See Asmundson, V. S. 1
KNOTT, ELIZABETH M. A quantitative study of the utilization and retention of vitamin B by young children 597
KNOTT, ELIZABETH M. See Schlutz, Frederic W. 583

LEAF, green, the availability of the proteins and inorganic salts of 237
LEPKOVSKY, SAMUEL AND THOMAS H. JUKES. The response of rats, chicks and turkey poults to crystalline vitamin G (flavin) 515
LEVINE, HAROLD. See Remington, Roe E. 27
Liver meal, effect of, on hatchability of hens' eggs 301
LONGWELL, BERNARD B., ROBERT P. JOHNSTON AND ROBERT M. HILL. The activity of yeast extract in the prevention of renal hypertrophy caused by high protein diets 155
Lysine, *d*(—)-, availability of, for growth 671

MANLY, RICHARD S. See Murlin, William R. 491, 645
MASSENGALE, O. N. AND CHARLES E. BILLS. A quantitative method for the assay of vitamin D with chickens 429
Mendel, L. B. See Horwitt, M. K. 237, 255
MENDEL, LAFAYETTE B. See Orten, James M. 373
Metabolic studies of Eskimos in the Canadian Eastern Arctic 337
Metabolism, phosphorus deciency, and food utilization in beef heifers ... 121
Metabolism studies in nutritional muscular dystrophy 191
Method, quantitative, for the assay of vitamin D with chickens 429
Method, vitamin B assay using rat curative 461
MITCHELL, HELEN S. Susceptibility of different strains of rats to nutritional cataract 447
MORGULIS, S. AND HOWARD C. SPENCER. Metabolism studies in nutritional muscular dystrophy 191
MORGULIS, S. AND HOWARD C. SPENCER. Studies on the blood and tissues in nutritional muscular dystrophy .. 173
MURLIN, JOHN R., ALAN C. BURTON AND W. M. BARROWS, JR. The specific dynamic action of butter fat, and of superimposed sugar .. 613
MURLIN, JOHN R., E. S. NASSET, WILLIAM R. MURLIN AND R. S. MANLY. The rate of ketogenesis in human subjects on high fat diets, as influenced by different sugars 645
MURLIN, JOHN R. See Clark, Dwight E. 469
MURLIN, WILLIAM R. See Murlin, John R. 645

MURLIN, WILLIAM R. AND RICHARD S. MANLY. Comparative effects of glucose, sucrose and fructose on ketone substance production in phlorhizinized dogs 491

NASSET, E. S. See Murlin, John R. 645

NORRIS,, L. C. See Ringrose, A. T. 535, 553

O'HARA, PATRICIA H. AND HAZEL M. HAUCK. Storage of vitamin C by normal adults following a period of low intake 413

ORTEN, JAMES M., ARTHUR H. SMITH AND LAFAYETTE B. MENDEL. Relation of calcium and of iron to the erythrocyte and hemoglobin content of the blood of rats consuming a mineral deficient ration 373

PEAS, losses of vitamin C during the cooking of 285

Pellagra-like syndrome in chicks, differentiation between vitamin G and an insoluble factor preventing 535

Pellagra-like syndrome in chicks, differentiation between vitamin G and a soluble factor preventing 553

Phosphates, mono-, di- and tricalcium, effect of, on reproductive success in rats 509

Phosphorus deficiency metabolism and food utilization in beef heifers ... 121

Phosphorus, inorganic, blood serum content of 132

Phosphorus, inorganic, content in blood serum 132

Polyneuritis in chicks, effect of, upon the in vivo rate of removal of pyruvate injected intravenously.. 321

POTTER, VAN R. See Franke, Kurt W. 205

Proteins and inorganic salts of the green leaf, availability of 237

Pyruvate metabolism in polyneuritis .. 321

RABINOWITCH, I. M., AND FLORENCE C. SMITH. Metabolic studies of Eskimos in the Canadian Eastern Arctic 337

Rat, albino, relation of season sex and weight to the basal metabolism of 223

Rat, fat absorption in, the influence of vitamins A, B or D, anemia or fasting upon the rate of 357

Rat growth technic for assay of vitamin B 583

Rats, normal, rachitic and healing rachitic, a study of the fecal flora and the line test of 165

RECORD, P. R. See Bethke, R. M. 297, 309

REMINGTON, ROE E., E. J. COULSON AND HAROLD LEVINE. Studies on the relation of diet to goiter. IV. The antigoitrogenic value of some foods 27

Renal hypertrophy, activity of yeast extract in prevention of, caused by high protein diets 155

Reproduction, effect of toxic wheat on 210

Reproduction in rats, effect of a high calcium level on 511

Reproductive success in rats, effect of mono-, di- and tricalcium phosphates on 509

Rickets, effect of vitamin A (carotene) intake on the vitamin D requirement of rats in the reproduction and cure of 39

RINGROSE, A. T. AND L. C. NORRIS. Differentiation between vitamin G and an insoluble factor preventing a pellagra-like syndrome in chicks 535

RINGROSE, A. T. AND L. C. NORRIS. Differentiation between vitamin G and a soluble factor preventing a pellagra-like syndrome in chicks.. 553

SCHLUTZ, FREDERIC W. AND E. M. KNOTT. The use of a 10-day period for the assay of vitamin B by rat growth technic 583

SCHMIDT, C. R. See Ivy, A. C. 59

Selenium containing foodstuffs, effect of, on growth and reproduction of rats at various ages 205

SHERMAN, W. C. AND C. A. ELVEHJEM. The effect of polyneuritis in chicks upon the in vivo rate of removal of pyruvate injected intravenously 321

SHERWOOD, T. C. The relation of season, sex and weight to the basal metabolism of the albino rat ... 223

SMITH, ARTHUR H. See Orten, James M. 373

SMITH, FLORENCE C. See Rabinowitch, I. M. 337

Specific dynamic action of butter fat and of superimposed sugar 613

Sodium bicarbonate, and ammonium chloride, effect of administration of, on the amount of ascorbic acid found in the urine 215

Soy beans, raw and heated, effect of cystine and casein supplements upon the nutritive value of the protein of 275

Starch digestion, effect of human saliva on, in duodenal fistula dog 70

Starch digestion in duodenal fistula dogs 69

Starches, effectiveness of malt amylase on the gastric digestion of 59

STEENBOCK, H., MARGARET HOUSE IRWIN AND JANET WEBER 103

STEENBOCK, H. See Hayward, J. W. 275

STEENBOCK, H. See Irwin, Margaret House 85, 357, 365

STEPHENS, D. J. See Hawley, Estelle E. 215

STOKSTAD, E. L. R. See Almquist, H. J. 329

Specific dynamic action of glycine intravenously administered to nephrectomized dogs 113

SPENCER, HOWARD C. See Morgulis S. 173, 191

Sugar, specific dynamic action of ... 613

Sugars, different, rate of ketogenesis in human subjects on high fat diets, as influenced by 645

TABOR, FLORENCE S., R. ADAMS DUTCHER AND N. B. GUERRANT. The effect of the vitamin A (carotene) intake on the vitamin D requirement of rats in the reproduction and cure of rickets 39

TEMPLIN, VERA MAY. See Irwin, Margaret House 85

TISDALL, F. F. See Drake, T. G. H. 527

TRESSLER, DONALD K. See Fenton, Faith 285

VEGETABLES, canned, strained, determination of vitamin C in 405

Vitamins A, B or D, influence of, and anemia and fasting upon the rate of fat absorption in the rat 357

Vitamin A, effect of the (carotene) intake on the vitamin D requirement of rats in the production and cure of rickets 39
Vitamin B and G in normal eggs, observation on distribution of ... 309
Vitamin B, a quantitative study of the utilization and retention of, by young children 597
Vitamin B assay using rat curative method with modified diets and oral administration of addenda ... 461
Vitamin B, use of a 10-day period for the assay of, by rat growth technic 583
Vitamin B_6, distribution in some plant and animal products 455
Vitamin C, comparison of biological and chemical methods for determination of, in canned, strained vegetables 405
Vitamin C intake and excretion, relation of capillary resistance to ... 425
Vitamin C, losses of, during the cooking of peas 285
Vitamin C metabolism in humans 413
Vitamin C, storage of, by normal adults following low intake 413
Vitamin C studies with children of preschool age 15
Vitamin C, urinary excretion of, during high intake and subsequent lower intake 21
Vitamin D, a quantitative method for the assay of, with chickens 429
Vitamin D requirement of rats in the production and cure of rickets, effect of vitamin A intake on 39
Vitamin G containing foods, inverse relation between growth and incidence of cataract in rats given graded amounts of 387
Vitamin G content of eggs, effect of the ration of the hen on 309
Vitamin G, crystalline, response of rats, chicks and turkey poults to 515
Vitamin G deficiency, symptoms of ... 515
Vitamin G, differentiation between, and an insoluble factor preventing a pellagra-like syndrome in chicks ... 535
Vitamin G, differentiation between and a soluble factor preventing a pellagra-like syndrome in chicks ... 553
Vitamin G, relation of, to the hatchability of hens' eggs 297

WEBER, JANET. See Irwin, Margaret House 365
WEBER, JANET. See Steenbock, H. .. 103
Wheat germ oil, effect of, on hatchability of hens' eggs 301
Wheat, toxic, effect of, on reproduction 210
Whey, dried, effect of, on hatchability of hens' eggs 301
WILDER, F. W. See Bethke, R. M. .. 309

YEAST extract, activity of, in prevention of renal hypertrophy caused by high protein diets 155
Yeast, irradiated. The antirachitic value of, in infants 527